

National Marine Fisheries Service - 2013 Status of U.S. Fisheries
Status Determination Criteria used in the Most Recent Status Determinations

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Fishery Management Plan	ATLANTIC SEA SCALLOP				
Sea scallop - Northwestern Atlantic Coast	If stock biomass is equal or greater than Bmsy as measured by an absolute value of scallop meat (mt), overfishing occurs when fishing mortality exceeds Fmsy. If the total stock biomass is below Bmsy, overfishing occurs when fishing mortality exceeds the level that has a 50 percent probability to rebuild stock biomass to Bmsy in 10 years.	0.38	A scallop stock is in an overfished condition when stock biomass is below ½Bmsy.	125,358 mt	62,679 mt
Fishery Management Plan	ATLANTIC SALMON				
Atlantic salmon - Gulf of Maine	Overfishing is currently not defined (fishing mortality is set equal to zero).	Undefined	A stock is overfished when the stock biomass falls below the Conservation Spawning Escapement (CSE).	54000	29,199
Fishery Management Plan	NORTHEAST MULTISPECIES				
Acadian redfish - Gulf of Maine / Georges Bank	Overfishing occurs when F exceeds F at 50% maximum spawning potential.	0.04	Overfished is defined as spawning stock biomass less than ½ Btarget; Btarget is defined as 40% MSP	238,000 mt	119,000 mt
American plaice - Gulf of Maine / Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.18	Overfished is defined as spawning stock biomass less than ½ Btarget; Btarget is defined as 40% MSP	18,398 mt	9,199 mt
Atlantic cod - Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.18	Overfished is defined as spawning stock biomass less than ½ Btarget; Btarget is defined as 40% MSP	186,535 mt	93,267 mt

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Atlantic cod - Gulf of Maine	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.18	Overfished is defined as spawning stock biomass less than $\frac{1}{2}$ Btarget; Btarget is defined as 40% MSP	54,743 mt (model 1) 80,200 mt (model 2)	27,371 mt (model 1) 40,100 mt (model 2)
Atlantic halibut - Northwestern Atlantic Coast	Overfishing occurs when F exceeds $F_{0.1}$.	0.07	The stock is overfished when the total stock biomass is less than $\frac{1}{2}$ Btarget.	49,000 mt	24,500 mt
Atlantic wolffish - Gulf of Maine / Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.33	Overfished is defined as spawning stock biomass less than $\frac{1}{2}$ Btarget; Btarget is defined as 40% MSP	1,756 mt	878 mt
Haddock - Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.39	Overfished is defined as spawning stock biomass less than $\frac{1}{2}$ Btarget; Btarget is defined as 40% MSP	124,900 mt	62,450 mt
Haddock - Gulf of Maine	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.46	Overfished is defined as spawning stock biomass less than $\frac{1}{2}$ Btarget; Btarget is defined as 40% MSP	4904	2452

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Ocean pout - Northwestern Atlantic Coast	Overfishing occurs when the exploitation ratio is less than the median exploitation ratio from 1977-1985.	0.76 catch/ survey index	The stock is overfished when the 3-year moving average of the NEFSC spring survey is less than $\frac{1}{2}$ B _{MSY} proxy; where B _{MSY} proxy = average observed 1977-1985.	4.94 kg/tow	2.47 kg/tow
Offshore hake - Northwestern Atlantic Coast	Undefined	undefined	Undefined	undefined	undefined
Pollock - Gulf of Maine / Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.25	Overfished is defined as spawning stock biomass less than $\frac{1}{2}$ B _{target} ; B _{target} is defined as 40% MSP	91,000 mt	45,500 mt
Red Hake - Southern Georges Bank/Middle Atlantic	Overfishing occurs when the ratio between catch and survey biomass > AIM 1980-2009	3.038 kg/kt	3yr moving average of the spring suvery weight per tow < $\frac{1}{2}$ B _{MSY} proxy; where B _{MSY} proxy = average observed 1980-2010	1.02 kg/tow	0.51 kg/tow
Red Hake - Gulf of Maine/Northern Georges Bank	Overfishing occurs when the ratio between catch and survey biomass > AIM 1980-2009	0.163 kg/kt	3yr moving average of the spring suvery weight per tow < $\frac{1}{2}$ B _{MSY} proxy; where B _{MSY} proxy = average observed 1980-2010	2.53 kg/tow	1.27 kg/tow
Silver Hake - Gulf of Maine/Northern Georges Bank	Overfishing occurs when the ratio between catch and the arithmetic fall survey biomass index from the most recent three years exceeds the overfishing threshold	2.78 kg/kt	The stock is overfished when the 3-year moving average of the fall survey < $\frac{1}{2}$ B _{MSY} proxy; where B _{MSY} proxy = average observed 1973-1982	6.42 kg/tow	3.21 kg/tow
Silver Hake - Southern Georges Bank/Middle Atlantic	Overfishing occurs when the ratio between catch and the arithmetic fall survey biomass index from the most recent three years exceeds the overfishing threshold	34.19 kg/kt	The stock is overfished when the 3-year moving average of the fall survey < $\frac{1}{2}$ B _{MSY} proxy; where B _{MSY} proxy = average observed 1973-1982	0.83 kg/tow	0.415 kg/tow
White hake - Gulf of Maine / Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.20	Overfished is defined as spawning stock biomass less than $\frac{1}{2}$ B _{target} ; B _{target} is defined as 40% MSP	32,400 mt	16,200 mt

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Windowpane - Gulf of Maine / Georges Bank	Overfishing occurs when the exploitation ratio is less than the median exploitation ratio from 1975-2007.	0.44 catch/ survey index	The stock is overfished when the 3-year moving average of the fall survey is less than $\frac{1}{2}$ B _{MSY} proxy; where B _{MSY} proxy = average observed 1975-2007.	1.6 kg/tow	0.8 kg/tow
Windowpane - Southern New England / Mid-Atlantic	Overfishing occurs when the exploitation ratio is less than the median exploitation ratio from 1975-2007.	2.09 catch/ survey index	The stock is overfished when the 3-year moving average of the fall survey is less than $\frac{1}{2}$ B _{MSY} proxy; where B _{MSY} proxy = average observed 1975-2007.	0.24 kg/tow	0.12 kg/tow
Winter flounder - Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.42	Overfished is defined as spawning stock biomass less than $\frac{1}{2}$ B _{target} ; B _{target} is defined as 40% MSP	11,800 mt	5,9000 mt
Winter flounder - Gulf of Maine	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.23	Overfished is defined as spawning stock biomass less than $\frac{1}{2}$ B _{target} ; B _{target} is defined as 40% MSP	not estimated	not estimated
Winter flounder - Southern New England / Mid-Atlantic	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.29	Overfished is defined as spawning stock biomass less than $\frac{1}{2}$ B _{target} ; B _{target} is defined as 40% MSP	43,661 mt	21,831 mt
Witch flounder - Northwestern Atlantic Coast	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.27	Overfished is defined as spawning stock biomass less than $\frac{1}{2}$ B _{target} ; B _{target} is defined as 40% MSP	10,051 mt	5,026 mt
Yellowtail flounder - Cape Cod / Gulf of Maine	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.26	Overfished is defined as spawning stock biomass less than $\frac{1}{2}$ B _{target} ; B _{target} is defined as 40% MSP	7,080 mt	3,540 mt
Yellowtail flounder - Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.25	Overfished is defined as spawning stock biomass less than $\frac{1}{2}$ B _{target} ; B _{target} is defined as 40% MSP	43,200 mt	21,600 mt
Yellowtail flounder - Southern New England / Mid-Atlantic	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	0.32	Overfished is defined as spawning stock biomass less than $\frac{1}{2}$ B _{target} ; B _{target} is defined as 40% MSP	2,995 mt	1,497 mt

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Fishery Management Plan	NORTHEAST SKATE COMPLEX				
Barndoor skate - Georges Bank / Southern New England	Overfishing occurs when the 3-year moving average of the autumn survey mean weight per tow declines 30% or more, or when the autumn survey mean weight per tow declines for 3 consecutive years.	See Overfishing Definition	The stock is in an overfished condition when the 3-year moving average of the autumn survey mean weight per tow is less than one-half of the mean weight per tow observed in the autumn trawl survey from 1963-1966.	1.57 kg/tow	0.78 kg/tow
Clearnose skate - Southern New England / Mid-Atlantic	Overfishing occurs when the 3-year moving average of the autumn survey mean weight per tow declines 30% or more, or when the autumn survey mean weight per tow declines for 3 consecutive years.	See Overfishing Definition	The stock is in an overfished condition when the 3-year moving average of the autumn survey mean weight per tow is less than one-half of the mean weight per tow observed in the autumn trawl survey from 1975-2007.	0.66 kg/tow	0.33 kg/tow
Little skate - Georges Bank / Southern New England	Overfishing occurs when the 3-year moving average of the spring survey mean weight per tow declines 20% or more, or when the spring survey mean weight per tow declines for three consecutive years.	See Overfishing Definition	The stock is in an overfished condition when the 3-year moving average of the spring survey mean weight per tow is less than one-half of the mean weight per tow observed in the spring trawl survey from 1982-2008.	6.15 kg/tow	3.07 kg/tow
Rosette skate - Southern New England / Mid-Atlantic	Overfishing occurs when the 3-year moving average of the autumn survey mean weight per tow declines 60% or more, or when the autumn survey mean weight per tow declines for 3 consecutive years.	See Overfishing Definition	The stock is in an overfished condition when the 3-year moving average of the autumn survey mean weight per tow is less than one-half of the mean weight per tow observed in the autumn trawl survey from 1967-2007.	0.048 kg/tow	0.024 kg/tow
Smooth skate - Gulf of Maine	Overfishing occurs when the 3-year moving average of the autumn survey mean weight per tow declines 30% or more, or when the autumn survey mean weight per tow declines for 3 consecutive years.	See Overfishing Definition	The stock is in an overfished condition when the 3-year moving average of the autumn survey mean weight per tow is less than one-half of the mean weight per tow observed in the autumn trawl survey from 1963-2007.	0.27 kg/tow	0.13 kg/tow

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Thorny skate - Gulf of Maine	Overfishing occurs when the 3-year moving average of the autumn survey mean weight per tow declines 20% or more, or when the autumn survey mean weight per tow declines for 3 consecutive years.	See Overfishing Definition	The stock is in an overfished condition when the 3-year moving average of the autumn survey mean weight per tow is less than one-half of the mean weight per tow observed in the autumn trawl survey from 1963-2007.	4.13 kg/tow	2.06 kg/tow
Winter skate - Georges Bank / Southern New England	Overfishing occurs when the 3-year moving average of the autumn survey mean weight per tow declines 20% or more, or when the autumn survey mean weight per tow declines for 3 consecutive years.	See Overfishing Definition	The stock is in an overfished condition when the 3-year moving average of the autumn survey mean weight per tow is less than one-half of the mean weight per tow observed in the autumn trawl survey from 1967-2007.	5.6 kg/tow	2.8 kg/tow
Fishery Management Plan	ATLANTIC HERRING				
Atlantic herring - Northwestern Atlantic Coast	If the stock biomass is equal to or greater than B_{MSY} , overfishing occurs when F exceeds F_{MSY} . If the stock biomass is less than B_{MSY} , overfishing occurs when F exceeds the level that has a 50-percent probability of rebuilding the stock biomass to B_{MSY} in 5 years ($F_{THRESHOLD}$).	0.27	The stock is overfished when stock biomass is less than $\frac{1}{2} B_{MSY}$.	157,000 mt	78,500 mt
Fishery Management Plan	DEEP-SEA RED CRAB				
Red deepsea crab - Northwestern Atlantic	Overfishing is defined as any rate of exploitation such that the ratio of current exploitation to an idealized exploitation under MSY conditions exceeds a value of 1.0 (the actual measure of exploitation used is determined by the availability of suitable data).	2830 mt	The stock is overfished if current biomass is below $\frac{1}{2} B_{msy}$, annual fleet average CPUE continues to decline below a baseline level for three or more consecutive years, or annual fleet average CPUE falls below a minimum threshold level in any single year.	not estimated	not estimated

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Fishery Management Plan	MONKFISH				
Monkfish - Gulf of Maine / Northern Georges Bank	Overfishing occurs when F exceeds $F_{\text{THRESHOLD}}$, which is set equal to F_{MAX} .	0.44	The stock is overfished when total stock biomass is less than 1/2 Bmax.	46,074 mt	23,037 mt
Monkfish - Southern Georges Bank / Mid-Atlantic	Overfishing occurs when F exceeds $F_{\text{THRESHOLD}}$, which is set equal to F_{MAX} .	0.37	The stock is overfished when total stock biomass is less than 1/2 Bmax.	71,667 mt	35,834 mt
Fishery Management Plan	SPINY DOGFISH				
Spiny dogfish - Atlantic Coast	Overfishing occurs when F exceeds F_{msy} or a reasonable proxy thereof.	0.244	The stock is overfished when the biomass is less than 1/2 B_{msy} or a reasonable proxy thereof.	159,288 mt	79,644 mt
Fishery Management Plan	SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS				
Black sea bass - Mid-Atlantic Coast	Overfishing occurs when F exceeds the threshold of F_{msy} or reasonable proxy thereof.	0.44	The stock is overfished when the spawning stock biomass falls below the minimum biomass threshold of 1/2 B_{msy} or reasonable proxy thereof.	10,880 mt	5,440 mt
Scup - Atlantic Coast	Overfishing occurs when F exceeds the threshold of F_{msy} or reasonable proxy thereof.	0.177	The stock is overfished when the spawning stock biomass falls below the minimum biomass threshold of 1/2 B_{msy} or reasonable proxy thereof.	92,044 mt	46,022 mt
Summer flounder - Mid-Atlantic Coast	Overfishing occurs when F exceeds the threshold of F_{msy} or reasonable proxy thereof.	0.31	The stock is overfished when the spawning stock biomass falls below the minimum biomass threshold of 1/2 B_{msy} or reasonable proxy thereof.	62,394 mt	31,197 mt

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Fishery Management Plan	BLUEFISH				
Bluefish - Atlantic Coast	Overfishing occurs when F exceeds the threshold F_{MSY} .	0.19	The stock is overfished when the minimum biomass is less than $\frac{1}{2}B_{MSY}$.	147,052 mt	73,526 mt
Fishery Management Plan	ATLANTIC SURFCLAM AND OCEAN QUAHOG				
Atlantic surfclam - Mid-Atlantic Coast	Overfishing occurs when F exceeds $F_{MSY} = M$ (the natural mortality rate).	0.15	The stock is overfished when the current biomass estimate is less than $\frac{1}{2}$ of the Bmsy proxy.	543,000 mt (meat weight)	272,000 mt (meat weight)
Ocean quahog - Atlantic Coast	Overfishing occurs when F exceeds F25% MSP.	0.02	The stock is overfished when the minimum biomass is less than the biomass threshold of $\frac{1}{2}B_{MSY}$ or $\frac{1}{4}$ of the virgin biomass.	1.73 million mt (meat weight).	1.39 million mt (meat weight)
Fishery Management Plan	ATLANTIC MACKEREL, SQUID, AND BUTTERFISH				
Atlantic mackerel - Gulf of Maine / Cape Hatteras	Overfishing occurs when F exceeds the fishing mortality threshold of F_{MSY} .	0.16	A stock is overfished when biomass falls below $\frac{1}{2}$ BMSY.	644,000 mt	322,000 mt
Butterfish - Gulf of Maine / Cape Hatteras	Overfishing occurs when F exceeds the fishing mortality threshold of F_{MSY} . The 2009 assessment included three candidate values, but no preferred estimate.	0.52 0.72 1.04	The stock is overfished when the minimum biomass is less than the biomass threshold of $\frac{1}{2}B_{MSY}$.	undefined	undefined
Longfin inshore squid - Georges Bank / Cape Hatteras	Overfishing occurs when fishing mortality exceeds FThreshold	not estimated	The stock is overfished when biomass is less than $\frac{1}{2}B_{MSY}$.	42,405 mt	21,203 mt

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Northern shortfin squid - Northwestern Atlantic Coast	Overfishing occurs when fishing mortality exceeds $F_{Threshold}$	1.22	Undefined	undefined	undefined
Fishery Management Plan	TILEFISH				
Tilefish - Mid-Atlantic Coast	Overfishing occurs when the catch associated with a threshold F of F_{MSY} is exceeded.	0.16	The stock is overfished when the total stock biomass falls below the minimum biomass threshold ($B_{THRESHOLD}$) of $\frac{1}{2}B_{MSY}$.	11,400 mt	5,700 mt

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Fishery Management Plan	GOLDEN CRAB FISHERY OF THE SOUTH ATLANTIC REGION				
Golden deepsea crab - Southern Atlantic Coast	Overfishing occurs when the F associated with the fishing mortality rate that produces maximum sustainable yield (F_{MSY}) is exceeded.	0.21	A stock is overfished when the current biomass ($B_{CURRENT}$) is less than the minimum stock size threshold (MSST). The MSST is defined as a ratio of current biomass ($B_{CURRENT}$) to biomass at MSY or $(1-M) * B_{MSY}$, where 1-M should never be less than 0.5.	837,000 lbs	753,000 lbs
Fishery Management Plan	SHRIMP FISHERY OF THE SOUTH ATLANTIC				
Brown rock shrimp - Southern Atlantic Coast	MSY/OY for rock shrimp is the mean total landings for the South Atlantic during 1986 through 2000 (4,912,927 pounds heads on), where overfishing (MFMT) for rock shrimp is a fishing mortality rate that leads to annual landings larger than two standard deviations (9,774,848 pounds heads on) above MSY ($4,912,927 + 9,774,848 = 14,687,775$ //pounds heads on) for two consecutive years.	14,687,775 pounds heads on) for two consecutive years.	Undefined	Undefined	Undefined
Brown shrimp - Southern Atlantic Coast	Overfishing (MFMT) is a fishing mortality rate that diminishes the stock below the designated MSY stock abundance (B_{MSY}) for two consecutive years.	9,200,000 lbs. tails	MSST is established with two thresholds: (1) if the stock diminishes to $\frac{1}{2}$ MSY abundance ($\frac{1}{2} B_{MSY}$) in one year, or (b) if the stock is diminished below MSY abundance (B_{MSY}) for two consecutive years. A proxy for B_{MSY} would be established for each species using CPUE information from SEAMAP-SA data as the lowest values in the 1990-2003 time period that produced catches meeting MSY the following year.	CPUE = 2.000 individuals per hectare	The proxy for B_{MSY} is CPUE = 2.000 individuals per hectare.

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Pink shrimp - Southern Atlantic Coast	Overfishing (MFMT) is a fishing mortality rate that diminishes the stock below the designated MSY stock abundance (B_{MSY}) for two consecutive years.	1,800,000 lbs. tails	MSST is established with two thresholds: (1) if the stock diminishes to $\frac{1}{2}$ MSY abundance ($\frac{1}{2} B_{MSY}$) in one year, or (b) if the stock is diminished below MSY abundance (B_{MSY}) for two consecutive years. A proxy for B_{MSY} would be established for each species using CPUE information from SEAMAP-SA data as the lowest values in the 1990-2003 time period that produced catches meeting MSY the following year.	CPUE = 0.089 individuals per hectare	The proxy for B_{MSY} = 0.089 individuals per hectare.
White shrimp - Southern Atlantic Coast	Overfishing (MFMT) is a fishing mortality rate that diminishes the stock below the designated MSY stock abundance (B_{MSY}) for two consecutive years.	14,500,000 lbs. tails	MSST is established with two thresholds: (1) if the stock diminishes to $\frac{1}{2}$ MSY abundance ($\frac{1}{2} B_{MSY}$) in one year, or (b) if the stock is diminished below MSY abundance (B_{MSY}) for two consecutive years. In addition a stock is overfished when the overwintering white shrimp population within a state's water declines by 80% or more following severe winter resulting in prolonged cold water temperatures. A proxy for B_{MSY} would be established for each species using CPUE information from SEAMAP-SA data as the lowest values in the 1990-2003 time period that produced catches meeting MSY the following year.	CPUE = 5.868 individuals per hectare	The proxy for B_{MSY} is CPUE = 5.868 individual per hectare.
Fishery Management Plan	SNAPPER-GROUPER FISHERY OF THE SOUTH ATLANTIC REGION				
Black grouper - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT' = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.25	Overfished is defined as a stock size less than MSST'. MSST' = $1-M*B_{MSY}$.	not estimated	not estimated

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Black sea bass - Southern Atlantic Coast	Overfishing is occurring when: a) the fishing mortality rate exceeds the Fmsy or Fmsy proxy only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed. Fmsy or Fmsy proxy are determined from the latest stock assessment.	0.61	Overfished is defined as a stock size less than MSST, where $MSST = 1 - M * SSB_{MSY}$.	2.56 trillion eggs	1.59 trillion eggs
Blueline tilefish - Southern Atlantic Coast	Overfishing is occurring when: a) the fishing mortality rate exceeds the Fmsy or Fmsy proxy only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed. Fmsy or Fmsy proxy are determined from the latest stock assessment.	0.30	Overfished is defined as a stock size less than MSST, where $MSST = 1 - M * SSB_{MSY}$.	679500 adult spawners	not available
Gag - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} .	0.24	Overfished is defined as a stock size less than MSST, where $MSST = 1 - M * SSB_{MSY}$.	7,925,000 lbs	6,816,000
Gray triggerfish - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.80	Overfished is defined as a stock size less than MSST. $MSST = 1 - M * B_{MSY}$.	not estimated	not estimated
Greater amberjack - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.42	Overfished is defined as a stock size less than MSST, where $MSST = 1 - M * B_{MSY}$ and $M = 0.25$.	1,940 mt	1,455 mt
Lane snapper - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.67	Overfished is defined as a stock size less than MSST. $MSST = 1 - M * B_{MSY}$.	not estimated	not estimated

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Red grouper - Southern Atlantic Coast	Overfishing is occurring when: a) the fishing mortality rate exceeds the Fmsy or Fmsy proxy only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed. Fmsy or Fmsy proxy are determined from the latest stock assessment.	0.22	Overfished is defined as a stock size less than MSST. MSST = 75%SSBmsy. NOTE: The most recent assessment has not yet used this definition of overfished.	2,592 mt	2,229 mt
Red porgy - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} .	0.17	Overfished is defined as a stock size less than MSST. MSST = $(1-M)B_{MSY}$ and $M = 0.225$.	3,933 mt	3,048 mt
Red snapper - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} .	0.20	Overfished is defined as a stock size less than MSST. MSST = $1-M*B_{MSY}$.	168 mt	154 mt
Scamp - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.23	Overfished is defined as a stock size less than MSST. MSST = $1-M*B_{MSY}$.	not estimated	not estimated
Snowy grouper - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} .	0.05	Overfished is defined as a stock size less than MSST. MSST = $SSBMSY(0.75)$.	4.37 million lbs.	3.50 million lbs.
Speckled hind - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.14	Overfished is defined as a stock size less than MSST. MSST = $1-M*B_{MSY}$.	not estimated	not estimated
Tilefish - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} .	0.19	Overfished is defined as a stock size less than MSST. MSST = $SSBMSY(0.75)$.	25.304 mt	22.564 mt
Vermilion snapper - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} .	0.75	Overfished is defined as a stock size less than MSST = $(1-c)B_{MSY}$, where c is the lesser of M or 0.5. $M = 0.25$; the best estimate of MSST is $0.75B_{MSY}$.	5.98 trillion eggs	4.66 trillion eggs
Warsaw grouper - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.18	Overfished is defined as a stock size less than MSST. MSST = $1-M*B_{MSY}$.	not estimated	not estimated

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
White grunt - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.26	Overfished is defined as a stock size less than MSST. $MSST = 1-M*B_{MSY}$.	not estimated	not estimated
Wreckfish - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.36	Overfished is defined as a stock size less than MSST. $MSST = 1-M*B_{MSY}$.	not estimated	not estimated
Yellowedge grouper - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.20	Overfished is defined as a stock size less than MSST. $MSST = 1-M*B_{MSY}$.	not estimated	not estimated
Fishery Management Plan	SOUTH ATLANTIC SNAPPER-GROUPER AND REEF FISH RESOURCES OF THE GULF OF MEXICO				
Goliath grouper - Southern Atlantic Coast / Gulf of Mexico	Overfishing is defined as an F in excess of the fishing mortality rate corresponding to a 40% Static SPR in the South Atlantic and 50% Static SPR in the Gulf of Mexico.	Unknown	South Atlantic - Overfished is defined as a stock size less than MSST. Gulf of Mexico - Overfished is undefined.	not estimated	See Overfished Definition
Mutton snapper - Southern Atlantic Coast / Gulf of Mexico	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.34	Overfished is defined as a stock size less than $MSST = (1-c)B_{MSY}$, where c is the lesser of M or 0.5. $M = 0.2$; the best estimate of MSST for yellowtail snapper is $0.8B_{MSY}$.	6,296 mt	5,603 mt
Yellowtail snapper - Southern Atlantic Coast / Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the Fmsy or Fmsy proxy only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed. Fmsy or Fmsy proxy are determined from the latest stock assessment.	0.24	Overfished is defined as a stock size less than $MSST = (1-c)B_{MSY}$, where c is the lesser of M or 0.5. $M = 0.2$	8.42 million lbs	6.79 million lbs

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Fishery Management Plan	CORAL, CORAL REEFS, AND LIVE / HARD BOTTOM HABITATS OF THE SOUTH ATLANTIC REGION				
Fire Corals, Hydrocorals, Octocorals, Stony Corals, Black Corals	Overfishing is defined as an annual level of harvest that exceeds optimum yield (OY). OY for coral reefs, stony corals, hydrocorals, black corals, seafans, and live rock is zero, except as may be authorized for scientific and educational purposes. Harvest of allowable octocorals in the EEZ is specified by the South Atlantic Council each year.	0 for all species except octocorals ($F/F_{MSY} < 1$)	In South Atlantic overfished is defined as a stock size less than MSST. $MSST = 1 - M * B_{MSY}$.	not estimated	not estimated
Fishery Management Plan	PELAGIC SARGASSUM HABITAT OF THE SOUTH ATLANTIC REGION				
Sargassum - Southern Atlantic Coast	Overfishing is defined as the rate of harvest which compromises the stock's ability to produce MSY.	*not estimated	A stock is overfished when the stock is reduced below MSST.	50,000 mt	25,000 mt
	*Although the MFMT was disapproved, an examination of the rate of harvest (currently zero), relative to the approved MSY level (100,000 mt), indicates that overfishing is not occurring. In addition, no directed fishery for this stock currently exists. This species has the capacity to increase its biomass through vegetative growth by as much as 10 percent per day, thus doubling its biomass every two weeks.				
Fishery Management Plan	DOLPHIN AND WAHOO FISHERY OF THE ATLANTIC / COASTAL MIGRATORY PELAGICS OF THE GULF OF MEXICO AND SOUTH ATLANTIC				
Dolphinfish - Southern Atlantic Coast / Gulf of Mexico	Overfishing is defined as a fishing mortality rate (F) in the excess of F_{MSY} (F30% Static SPR).	0.49	A stock is overfished if current biomass (B_{curr}) is less than MSST and would be recovered when current biomass was equal or greater than the biomass at MSY. MSST is defined $(1 - M) * B_{MSY}$, where 1-M should never be less than 0.5. Using the best estimates of natural mortality ($M = 0.68 - 0.80$) in the formula results in a MSST of 50% B_{MSY} .	$B_{1998}/B_{msy} = 1.56$; Bmsy not estimated.	$B_{1998}/MSST > 1$; MSST not estimated

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Fishery Management Plan	COASTAL MIGRATORY PELAGIC RESOURCES OF THE GULF OF MEXICO AND SOUTH ATLANTIC				
Cobia - Gulf of Mexico	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.38	A stock is overfished when the stock size is less than the minimum stock size threshold. $MSST = (1-M)*B_{MSY}$ or 70% of B_{MSY}	2,065 mt	1,280 mt
Cobia - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.46	A stock is overfished when the stock size is less than the minimum stock size threshold. $MSST = (1-M)*B_{MSY}$ or 70% of B_{MSY}	536,000 lbs	397,000 lbs
King mackerel - Gulf of Mexico	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.19	A stock is overfished when the stock size is less than the minimum stock size threshold. For Gulf group King Mackerel, $MSST = (1-M)*B_{MSY}$ or 80% of B_{MSY} .	3.166 trillion eggs	2.615 trillion eggs
King mackerel - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.26	A stock is overfished when the stock size is less than the minimum stock size threshold. For Atlantic group King Mackerel, $MSST = (1-M)*B_{MSY}$ or 85% of B_{MSY} .	2.175 trillion eggs	1.826 trillion eggs
Little tunny - Gulf of Mexico	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.20	Undefined (Gulf); In South Atlantic overfished is defined as a stock size less than MSST. $MSST = 1-M*B_{MSY}$.	3,561,000 mt	1,780,500 to 2,848,800
	Little tunny was removed from federal management, but status will be reported through 2014				
Spanish mackerel - Gulf of Mexico	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.36	A stock is overfished when the stock size is less than the minimum stock size threshold. $MSST = (1-M)*B_{MSY}$ or 70% of B_{MSY}	10,339 mt	6,410 mt

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Spanish mackerel - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = F_{MSY} where $F_{MSY} = F_{30\%SPR}$.	0.69	A stock is overfished when the stock size is less than the minimum stock size threshold. $MSST = (1-M)*B_{MSY}$ or 70% of B_{MSY}	3.27 million adult spawners	2.13 million adult spawners
Fishery Management Plan	SPINY LOBSTER IN THE GULF OF MEXICO AND SOUTH ATLANTIC				
Caribbean spiny lobster - Southern Atlantic Coast / Gulf of Mexico	Overfishing is defined as an F in excess of the fishing mortality rate corresponding to a 20% SPR where $F_{MSY} = F_{20\%SPR}$.	0.42	(Gulf) Overfished is defined as a stock size less than MSST. $MSST = 1-M*B_{MSY}$.	not estimated	not estimated
Fishery Management Plan	SHRIMP FISHERY OF THE GULF OF MEXICO				
Brown shrimp - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	Parent stock level = 125 million shrimp.	An overfished condition would result when a parent stock number falls below one-half of the overfishing definition.	125 million shrimp	63 million shrimp
Pink shrimp - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	Parent stock level = 100 million shrimp.	An overfished condition would result when a parent stock number falls below one-half of the overfishing definition.	100 million shrimp	50 million shrimp
White shrimp - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	Parent stock = 330 million shrimp.	An overfished condition would result when a parent stock number falls below one-half of the overfishing definition.	330 million shrimp	165 million shrimp

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Royal red shrimp - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	OY = 392,000 - 650,000 pounds of tails.	Undefined	Undefined	Undefined
Fishery Management Plan	REEF FISH RESOURCES OF THE GULF OF MEXICO				
Black grouper - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.216 (MFMT) OFL not available	Overfished is defined as a stock size less than $MSST = (1-M)*SSB_{MSY}$.	5.92 million lbs.	5.12 million lbs.
Gag - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.22 (MFMT) OFL not available	Overfished is defined as a stock size less than $MSST = (1-M)*SSB_{MSY}$.	22.51 million lbs.	19.14 million lbs.
Gray triggerfish - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.34 (MFMT) OFL not available	Overfished is defined as a stock size less than $MSST = (1-M)*SSB_{MSY}$.	17.78 trillion eggs	12.98 trillion eggs
Greater amberjack - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.33 (MFMT) OFL not available	Overfished is defined as a stock size less than $MSST = (1-M)*BMSY$.	14.73 million lbs.	11.048 million lbs.
Red grouper - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.187 (MFMT) OFL not available	Overfished is defined as a stock size less than $MSST = (1-M)*SSB_{MSY}$.	712.7 mt	612.9 mt

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Red snapper - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.078 (MFMT) OFL not available	A stock is overfished when the relative spawning potential drops below the MSST = (1-M)*B26%.	1.2 trillion eggs	not available
Tilefish - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	2.07 or 1.30 (MFMT) OFL not available	A stock is overfished when the relative spawning potential drops below the MSST = (1-M)*B30%.	17,986.44 lbs or 14,620.77 lbs	not available
Vermilion snapper - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.41 (MFMT) OFL not available	A stock is overfished when the relative spawning potential drops below the MSST = (1-M)*B30%.	120 trillion eggs	88 trillion eggs
Yellowedge grouper - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	1.06 (MFMT) OFL not available	A stock is overfished when the relative spawning potential drops below the MSST = (1-M)*B30%.	8.62 million lbs	7.99 million lbs
Fishery Management Plan	RED DRUM FISHERY OF THE GULF OF MEXICO				
Red drum - Gulf of Mexico	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.5 OFL not available	Undefined	Undefined	Undefined

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Fishery Management Plan	SPINY LOBSTER FISHERY OF PUERTO RICO AND THE U.S. VIRGIN ISLANDS				
Caribbean spiny lobster - Caribbean	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.34; 599,362 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	2,217,000 lbs.	1,463,000 lbs.
Fishery Management Plan	QUEEN CONCH RESOURCES OF PUERTO RICO AND THE U.S. VIRGIN ISLANDS				
Queen conch - Caribbean	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.3; 512,718 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	2,005,000 lbs.	1,404,000 lbs.
Fishery Management Plan	REEF FISH FISHERY OF PUERTO RICO AND THE U.S. VIRGIN ISLANDS				
Caribbean Snapper Unit 1	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.86; OFL All Snappers 1,915,759 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	1,202,000 lbs.	601,000 lbs.
	NOTE: A combination of qualitative and quantitative data were used to make the most recent overfished status determination for Snapper Unit 1.				
Caribbean Snapper Unit 2	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.44 OFL All Snappers 1,915,759 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	516,000 lbs.	289,000 lbs.

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Caribbean Snapper Unit 3	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.3 OFL All Snappers 1,915,759 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	2,403,000 lbs.	1,682,000 lbs.
Caribbean Snapper Unit 4	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.2; OFL All Snappers 1,915,759 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	2,214,000 lbs.	1,771,000 lbs.
Caribbean Grouper Unit 1	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.18; OFL All Groupers 396,483 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	20,000-190,000 lbs.	18,000-171,000 lbs.
	NOTE: A combination of qualitative and quantitative data were used to make the most recent overfished status determination for Grouper Unit 1.				
Caribbean Grouper Unit 2	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.13; OFL All Groupers 396,483 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	40,000-120,000 lbs.	38,000-114,000 lbs.
	NOTE: A combination of qualitative and quantitative data were used to make the most recent overfished status determination for Grouper Unit 2.				
Caribbean Grouper Unit 3	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.18; OFL All Groupers 396,483 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	1,045,000 lbs.	857,000 lbs.

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Caribbean Grouper Unit 4	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	0.18; OFL All Groupers 396,483 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	626,000 lbs.	513,000 lbs.
	NOTE: A combination of qualitative and quantitative data were used to make the most recent overfished status determinations for Grouper Unit 4.				
For the remaining stock complexes in this FMP, no criteria have been established through stock assessments. OFLs have been established and were used to compare the catch to determine if stock complexes were subject to overfishing					
Caribbean Angelfishes Complex	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	Not available	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
Caribbean Aquarium Trade Species Complex *	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	10,873 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
Caribbean Boxfishes Complex	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	141,460 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
Caribbean Goatfishes Complex	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	24,459 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Caribbean Grouper Unit 3	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	OFL All Groupers 396,483 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
Caribbean Grouper Unit 5	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	OFL All Groupers 396,483 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
Caribbean Grunts Complex	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	291,025 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
Caribbean Hogfish / Wrasses Complex	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	Not available	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
Caribbean Jacks Complex	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	228,284 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
Caribbean Parrotfishes Complex	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	507,059 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated

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Caribbean Porgies Complex	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	59,747 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
Caribbean Snapper Unit 2	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	OFL All Snappers 1,915,759 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
Caribbean Squirrelfishes Complex	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	Not available	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
Caribbean Surgeonfishes Complex	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	98,161 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
Caribbean Tilefishes Complex	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	45,553 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
Caribbean Triggerfishes and Filefishes Complex	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	199,811 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Fishery Management Plan	Corals and Reef Associated Plants and Invertebrates of Puerto Rico and the United States Virgin Islands				
Caribbean Aquarium Trade Species Complex *	Overfishing is occurring when: a) the fishing mortality rate exceeds the maximum fishing mortality rate only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed	10,873 lbs	Overfished is defined as a stock size less than MSST is set = $B_{MSY}(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	not estimated	not estimated
*NOTE: The OFL for Aquarium Trade Species Complex is distributed between species in both the Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands and the Corals and Reef Associated Plants and Invertebrates of Puerto Rico and the United States Virgin Islands FMPs.					

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Fishery Management Plan	WASHINGTON, OREGON, AND CALIFORNIA GROUND FISH				
Arrowtooth flounder - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is $F_{40\%}$ for flatfish and Whiting.	14,460 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	32,125 mt	20,078 mt
Aurora rockfish - Pacific Coast	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	1,050 mt	656.52 mt
Bank rockfish	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	537,889 - 536,571 eggs	336,181 - 335,357 eggs
Black rockfish - Northern Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The default FMSY proxy used for setting acceptable biological catches (ABCs) is for F50% rockfish (including thornyheads).	435 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	928.4 mt	580.25 mt
Black rockfish - Southern Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The default FMSY proxy used for setting acceptable biological catches (ABCs) is for F50% rockfish (including thornyheads).	1,169 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	1831.4 million larvae	1144 million larvae
Blackgill rockfish - Southern California	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	475,120 larvae	296,950 larvae
Blue rockfish - California	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	830.8 million larvae	519.25 million larvae

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Bocaccio - Southern Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is for $F_{50\%}$ rockfish (including thornyheads).	732 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	3,247.2 trillion eggs	2,029.5 trillion eggs
Brown rockfish - Pacific Coast	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	absolute estimates not calculated (only ratios)	absolute estimates not calculated (only ratios)
Cabazon - California	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The default FMSY proxy used for setting acceptable biological catches (ABCs) is $F_{45\%}$ for other groundfish such as sablefish and lingcod.	176 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	519.72 mt	324.83 mt
California scorpionfish - Southern California	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The default FMSY proxy used for setting acceptable biological catches (ABCs) is $F_{45\%}$ for other groundfish such as sablefish and lingcod.	132 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	409	256
Canary rockfish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is for $F_{50\%}$ rockfish (including thornyheads).	622 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	11,136 mt	6960 mt
Chilipepper - Southern Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is for $F_{50\%}$ rockfish (including thornyheads).	1,872 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	13,356 mt	8,348 mt
China rockfish - Pacific Coast	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	absolute estimates not calculated (only ratios)	absolute estimates not calculated (only ratios)

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Copper rockfish - Pacific Coast	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	absolute estimates not calculated (only ratios)	absolute estimates not calculated (only ratios)
Cowcod - Southern California	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The default FMSY proxy used for setting acceptable biological catches (ABCs) is for F50% rockfish (including thornyheads).	13 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	620 mt	387.35 mt
Darkblotched rockfish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The default FMSY proxy used for setting acceptable biological catches (ABCs) is for F50% rockfish (including thornyheads).	497 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	1,343 million eggs	839.5 million eggs
Dover sole - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F _{MSY}) on a continual basis. The default F _{MSY} proxy used for setting acceptable biological catches (ABCs) is F _{40%} for flatfish and Whiting.	44,826 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	117,466.5 mt	58,733.25 mt
English sole - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F _{MSY}) on a continual basis. The default F _{MSY} proxy used for setting acceptable biological catches (ABCs) is F _{40%} for flatfish and Whiting.	10,620 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	14,405 mt	9,003 mt
Gopher rockfish - Northern California	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	798	499
Greenspotted rockfish - Pacific Coast	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	5.43 trillion eggs	3.39 trillion eggs

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Greenstriped rockfish - Pacific Coast	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	2836	1,772
Kelp greenling - Oregon	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	129 mt	80 mt
Lingcod - North Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is $F_{45\%}$ for other groundfish such as sablefish and lingcod.	2,251 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	23,354 mt	14,597 mt
Longnose skate - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The default FMSY proxy used for setting acceptable biological catches (ABCs) is $F_{45\%}$ for other groundfish such as sablefish and lingcod.	3,006 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	2,814 mt	1,759 mt
Longspine thornyhead - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is for $F_{50\%}$ rockfish (including thornyheads).	3,483 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	15,654 mt	9,783.5 mt
Pacific Cod	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The default FMSY proxy used for setting acceptable biological catches (ABCs) is $F_{45\%}$ for other groundfish.	3,200 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	Unknown	Unknown
Pacific ocean perch - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is for $F_{50\%}$ rockfish (including thornyheads).	1,007 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	2.622 trillion eggs	1.639 trillion eggs

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Pacific hake - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is $F_{40\%}$ for flatfish and Whiting.	2012 US TAC = 186,037 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	0.832 million mt	not available
Petrale sole - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is $F_{40\%}$ for flatfish and Whiting.	1,279 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	8,107 mt	4,053.25 mt
Pacific sanddab - Pacific Coast	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	absolute estimates not calculated (only ratios)	absolute estimates not calculated (only ratios)
Rex sole - Pacific Coast	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	absolute estimates not calculated (only ratios)	absolute estimates not calculated (only ratios)
Rougheye rockfish - Pacific Coast	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	2,158 mt	1,348.5 mt
Sablefish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is $F_{45\%}$ for other groundfish such as sablefish and lingcod.	8,623 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	72,854.4 mt	45,534 mt
Sharpchin rockfish - Pacific Coast	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	absolute estimates not calculated (only ratios)	absolute estimates not calculated (only ratios)

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Shortbelly rockfish	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is for $F_{50\%}$ rockfish (including thornyheads).	6,950 mt	The overfished determination is presumably based on the 1989 stock assessment where virgin spawning biomass was estimated from an acoustic survey and a potential yield model was used to estimate MSY. Because this assessment was conducted pre-SFA, neither current biomass estimates nor an overfished threshold were identified.	19,800 mt	12,375 mt
Shortspine thornyhead - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is for $F_{50\%}$ rockfish (including thornyheads).	2,358 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	75,906 mt	47,441.25 mt
Spiny dogfish - Pacific Coast	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	28,289,600 fish	17,681,000 fish
Splitnose rockfish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is for $F_{50\%}$ rockfish (including thornyheads).	1,610 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	5,141 million eggs	3,213 million eggs
Starry flounder - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F_{MSY}) on a continual basis. The default F_{MSY} proxy used for setting acceptable biological catches (ABCs) is $F_{40\%}$ for flatfish and whiting.	1,813 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	2,864	1,790
Stripetail rockfish - Pacific Coast	Currently undefined	undefined	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	absolute estimates not calculated (only ratios)	absolute estimates not calculated (only ratios)

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Widow rockfish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The default FMSY proxy used for setting acceptable biological catches (ABCs) is for F50% rockfish (including thornyheads).	4,923 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	28,450 million eggs	17,781 million eggs
Yelloweye rockfish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F _{MSY}) on a continual basis. The default F _{MSY} proxy used for setting acceptable biological catches (ABCs) is for F _{50%} rockfish (including thornyheads).	48 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	411.08 million eggs	256.92 million eggs
Yellowtail rockfish - Northern Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (F _{MSY}) on a continual basis. The default F _{MSY} proxy used for setting acceptable biological catches (ABCs) is for F _{50%} rockfish (including thornyheads).	4,573 mt	A stock is overfished if its current biomass is less than 25% of the unfished biomass level or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY).	absolute estimates not calculated (only ratios)	absolute estimates not calculated (only ratios)
Fishery Management Plan	WEST COAST SALMON				
Chinook salmon - California Central Valley: Sacramento (fall)	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	78% Proxy	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	122,000	91,500
Chinook salmon - Columbia River Basin: Upper River (summer)	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	75%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	12,143	6,071
Chinook salmon - Columbia River Basin: Upper River Bright (fall)	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	85.91%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	39,625	19,812

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Chinook salmon - Northern California Coast: Klamath (fall)	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	71%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	40,700	30,525
Chinook salmon - Oregon Coast: Central and Northern	Undefined	N/A	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	60 fish per mile in index streams	30 fish per mile in index streams
Chinook salmon - Oregon Coast: Southern	Undefined	N/A	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	60 fish per mile in index streams	30 fish per mile in index streams
Chinook salmon - Washington Coast: Grays Harbor (fall)	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	78% Proxy	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	11,388	5,694
Chinook salmon - Washington Coast: Grays Harbor (spring)	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	78% Proxy	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	1,400	700
Chinook salmon - Washington Coast: Hoh (fall)	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	90%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	1,200	600
Chinook salmon - Washington Coast: Hoh (spring/summer)	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	78%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	900	450

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Chinook salmon - Washington Coast: Hoko (summer/fall)	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	78%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	850	425
Chinook salmon - Washington Coast: Queets (fall)	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	87%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2,500	1,250
Chinook salmon - Washington Coast: Queets (spring/summer)	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	78% Proxy	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	700	350
Chinook salmon - Washington Coast: Quillayute (fall)	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	87%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	3,000	1,500
Chinook salmon - Washington Coast: Quillayute (spring/summer)	Currently undefined	undefined	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	1,200	600
Chinook salmon - Washington Coast: Willapa Bay Fall (natural)	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	78% Proxy	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	3,393	1,697
Coho salmon - Puget Sound: Hood Canal	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	65%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	14,350	10,750

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Coho salmon - Puget Sound: Skagit	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	60%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	25,000	14,857
Coho salmon - Puget Sound: Snohomish	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	60%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	50,000	31,000
Coho salmon - Puget Sound: Stillaguamish	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	50%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	10,000	6,100
Coho salmon - Washington Coast: Grays Harbor	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	65%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	24,426	18,320
Coho salmon - Washington Coast: Hoh	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	65%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2,520	1,890
Coho salmon - Washington Coast: Queets	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	65%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	5,800	4,350
Coho salmon - Washington Coast: Quillayute (fall)	Undefined	N/A	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	6,300	4,725
Coho salmon - Washington Coast: Strait of Juan de Fuca	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	60%	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	11,000	7,000

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Pink salmon - Puget Sound (odd-numbered years)	Undefined	N/A	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	900,000	450,000

1. An approaching overfished determination will be made if the geometric mean of the two most recent postseason estimates of spawning escapement, and the current preseason forecast of spawning escapement, is below the MSST.
2. After an overfished status determination has been triggered, once the stock’s 3-year geometric mean of spawning escapement exceeds the MSST, but remains below SMSY, or other identified rebuilding criteria, the stock status will be recognized as “not overfished-rebuilding”. This status level requires no Council action, but rather is used to indicate that stock’s status has improved from the overfished level but the stock has not yet rebuilt.
3. The default criterion for determining that an overfished stock is rebuilt is when the 3-year geometric mean spawning escapement exceeds SMSY.

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Fishery Management Plan	COASTAL PELAGIC SPECIES				
Pacific chub mackerel - Pacific Coast	Overfishing occurs when F exceeds the Fmsy proxy.	44,346 mt	A stock is overfished when the biomass level is low enough to jeopardize the capacity of the stock to produce MSY on a continuing basis.	115,000 mt	18,200 mt
Pacific sardine - Pacific Coast	Overfishing occurs whenever catch exceeds ABC, which is the annual value of the MSY control rule	154,781 mt	A stock is overfished when the biomass level is low enough to jeopardize the capacity of the stock to produce MSY on a continuing basis.	not available	50,000 mt
Jack mackerel - Pacific Coast	Overfishing occurs whenever catch exceeds ABC, which, based on the default MSY control rule used for monitored species, is set at 25% of estimated MSY.	0.25	Undefined	Undefined	Undefined
Northern anchovy - Southern Pacific Coast	Overfishing occurs whenever catch exceeds ABC, which, based on the default MSY control rule used for monitored species, is set at 25% of estimated MSY.	0.25	Undefined	Undefined	Undefined
Opalescent inshore squid - Pacific Coast	Overfishing occurs when market squid are harvested at a rate or level that results in egg escapement falling below 30 percent of the potential maximum level.	not estimated	A stock is overfished when the ratio of egg escapement compared to the potential maximum level results in a ratio below 30 percent.	not estimated	not estimated
Fishery Management Plan	U.S. WEST COAST FISHERIES FOR HIGHLY MIGRATORY SPECIES				
Skipjack tuna - Eastern Tropical Pacific	Overfishing occurs if the fishing mortality rate exceeds MFMT or if catch exceeds overfishing limit (OFL) for 1 year or more.	not available	A stock is overfished when spawning stock biomass (SSB, or other reproductive potential) falls below the stock's MSST in a given year.	not available	not available
Yellowfin tuna - Eastern Tropical Pacific	Overfishing occurs if the fishing mortality rate exceeds MFMT or if catch exceeds overfishing limit (OFL) for 1 year or more.	not available	A stock is overfished when spawning stock biomass (SSB, or other reproductive potential) falls below the stock's MSST in a given year.	356,682 mt	not available

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Bigeye tuna - Eastern Tropical Pacific	Overfishing occurs if the fishing mortality rate exceeds MFMT or if catch exceeds overfishing limit (OFL) for 1 year or more.	not available	A stock is overfished when spawning stock biomass (SSB, or other reproductive potential) falls below the stock's MSST in a given year.	320,818 mt	not available
Striped marlin - Eastern Tropical Pacific	Overfishing occurs if the fishing mortality rate exceeds MFMT or if catch exceeds overfishing limit (OFL) for 1 year or more.	not available	A stock is overfished when spawning stock biomass (SSB, or other reproductive potential) falls below the stock's MSST in a given year.	not available	not available
Fishery Management Plan	U.S. WEST COAST FISHERIES FOR HIGHLY MIGRATORY SPECIES / PACIFIC PELAGICS FISHERIES OF THE WESTERN PACIFIC REGION				
Albacore tuna - North Pacific	Overfishing occurs if the fishing mortality rate exceeds MFMT or if catch exceeds overfishing limit (OFL) for 1 year or more.	not available	A stock is overfished when spawning stock biomass (SSB, or other reproductive potential) falls below the stock's MSST in a given year.	277,278 mt	not available
Blue shark - Pacific	Overfishing occurs if the fishing mortality rate exceeds MFMT or if catch exceeds overfishing limit (OFL) for 1 year or more.	0.14	A stock is overfished when spawning stock biomass (SSB, or other reproductive potential) falls below the stock's MSST in a given year.	299,800 mt	not available
Pacific bluefin tuna - Pacific	Overfishing occurs if the fishing mortality rate exceeds MFMT or if catch exceeds overfishing limit (OFL) for 1 year or more.	not estimated	A stock is overfished when spawning stock biomass (SSB, or other reproductive potential) falls below the stock's MSST in a given year.	124,498 mt	93,373.5 mt

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Fishery Management Plan	PELAGIC FISHERIES OF THE WESTERN PACIFIC REGION				
Blue marlin - Pacific	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.8-1.6$)	0.32	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.8-1.6$)	19,436.5 mt	not available
Yellowfin Tuna - Central Western Pacific	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.8-1.6$)	0.36	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.8-1.6$)	1419	not available
Skipjack Tuna - Central Western Pacific	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M > 0.5$)	0.8	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M > 0.5$)	1.87	not available
Albacore - South Pacific	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.3$)	0.16	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.3$)	587,000 mt	not available
Striped marlin - Central Western Pacific	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.3$)	0.61	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.3$)	2,713 mt	not available

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Indo-Pacific Blue Marlin - Pacific	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.2$)	not available	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.2$)	not available	not available
Fishery Management Plan	PELAGIC FISHERIES OF THE WESTERN PACIFIC REGION / WEST COAST HIGHLY MIGRATORY SPECIES				
Bigeye tuna - Central Western Pacific	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	0.16	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M=0.8$),	498,500 mt	not available
Swordfish - North Pacific	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.2$)	not available	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.2$)	not available	not available
Swordfish - Eastern Tropical Pacific	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.2$)	0.13	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.2$)	24,800 mt	17,360 mt
Swordfish - Central Western Pacific	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.2$)	0.26	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. ($M = 0.2$)	57,300 mt	40,110 mt

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Blue Shark - Pacific	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	0.14	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	not available	299,800 mt
Fishery Management Plan	PRECIOUS CORAL FISHERIES OF THE WESTERN PACIFIC REGION				
Makapu'u Bed Precious Corals Multi-species Complex	Overfishing occurs when F is greater than 0.066	0.066	A stock is overfished when the ratio of the total spawning stock biomass for all species combined to the estimated unfished total spawning stock biomass for all species combined (SPR) is less than 0.3, based on cohort analysis of the pink coral, <i>Corallium secundum</i> .	not estimated	not estimated
Fishery Management Plan	BOTTOMFISH AND SEAMOUNT GROUND FISH FISHERIES OF THE WESTERN PACIFIC REGION				
Main Hawaiian Islands Deep 7 Bottomfish Multi-species Complex	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. Effort (E) is used as a proxy for F . ($M=0.3$)	0.06	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. CPUE is used as a proxy for B . ($M=0.3$)	14.59 million lbs	10.21 million lbs
American Samoa Bottomfish Multi-species Complex	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. Effort (E) is used as a proxy for F . ($M=0.3$)	0.24	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. Effort (E) is used as a proxy for F . ($M=0.3$)	335,400 lbs	234,780 lbs
Northern Mariana Islands Bottomfish Multi-species Complex	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. Effort (E) is used as a proxy for F . ($M=0.3$)	0.26	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. CPUE is used as a proxy for B . ($M=0.3$)	683,600 lbs	478,520 lbs

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Guam Bottomfish Multi-species Complex	Overfishing occurs when F is greater than $F_{MSY} B / c B_{MSY}$ if the stock biomass (B) is less than or equal to $c B_{MSY}$, or when F is greater than F_{MSY} if the stock biomass (B) is greater than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. Effort (E) is used as a proxy for F . ($M=0.3$)	0.35	A stock is overfished when stock biomass (B) is less than $c B_{MSY}$, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. CPUE is used as a proxy for B . ($M=0.3$)	162,200 lbs	113,540 lbs

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Fishery Management Plan	GROUNDFISH OF THE GULF OF ALASKA				
Arrowtooth flounder - Gulf of Alaska	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	250,100 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	404,309 mt	not available
Atka mackerel - Gulf of Alaska	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	6,200 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Dusky Rockfish (indicator species for Pelagic Shelf Rockfish Complex)	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	6,257 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	18,293 mt	not available
Flathead sole - Gulf of Alaska	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	59,380 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	31,091 mt	not available
Gulf of Alaska Blackspotted and Roughey Rockfish Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	1,472 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	8,516 mt	not available
Gulf of Alaska Deepwater Flatfish Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	6,834 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	24,691 mt	undefined
Gulf of Alaska Octopus Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	1,941 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Gulf of Alaska Other Shallow Water Flatfish Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	67,768 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined

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Gulf of Alaska Other Slope Rockfish Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	5,305 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Gulf of Alaska Sculpin Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	7,641 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Gulf of Alaska Shallow Water Flatfish Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	61,681 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Gulf of Alaska Shark Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	8,037 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Gulf of Alaska Skate Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	11,229 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Gulf of Alaska Squid Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	1,530 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Longnose skate - Gulf of Alaska	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	3,803 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Northern rock sole - Gulf of Alaska	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	61,681 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	17,588 mt	not available

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of B _{msy} or Proxy	Estimate of Overfished
Northern rockfish - Western / Central Gulf of Alaska	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	6,574 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	26,314 mt	not available
Pacific cod - Gulf of Alaska	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	104,000 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	79,713 mt	not available
Pacific ocean perch - Gulf of Alaska	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	19,498 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	90,194 mt	not available
Rex sole - Gulf of Alaska	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	12,561 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	19,434 mt	not available
Rock sole - Gulf of Alaska	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	61,681 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	39,463 mt	not available
Shortraker rockfish - Gulf of Alaska	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	1,441 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Shortspine Thornyhead (indicator species for Thornyhead Rockfish Complex)	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	2,220 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Walleye pollock - Eastern Gulf of Alaska	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	14,366 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined

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Walleye pollock - Western / Central Gulf of Alaska	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	143,716 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	253,750 mt	not available
Yelloweye Rockfish (indicator species for Demersal Shelf Rockfish Complex)	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	467 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Fishery Management Plan	GROUNDFISH OF THE BERING SEA AND ALEUTIAN ISLANDS MANAGEMENT AREA				
Alaska plaice - Bering Sea / Aleutian Islands	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	64,600 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	133,000 mt	not available
Alaska skate - Bering Sea / Aleutian Islands (indicator for Bering Sea / Aleutian Islands Skate Complex)	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	39,100 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	93,384 mt	not available
Arrowtooth Flounder (indicator stock for Bering Sea / Aleutian Islands Arrowtooth Flounder Complex)	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	181,000 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	202,138 mt	not available
Atka mackerel - Aleutian Islands	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	96,500 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	101,860 mt	not available
Bering Sea / Aleutian Islands Blackspotted and Rougheye Rockfish Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	576 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	9,189 mt	not available

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Bering Sea / Aleutian Islands Other Flatfish Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	17,100 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Bering Sea / Aleutian Islands Other Rockfish Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	1,700 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Bering Sea / Aleutian Islands Other Skates Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	39,100 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Bering Sea / Aleutian Islands Sculpin Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	58,300 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Bering Sea / Aleutian Islands Shark Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	1,360 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Bering Sea / Aleutian Islands Squid Complex	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	2,620 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Flathead Sole (indicator stock for Bering Sea / Aleutian Islands Flathead Sole Complex)	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	84,500 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	112,250 mt	not available
Giant octopus - Bering Sea / Aleutian Islands (indicator stock for Bering Sea - Aleutian Islands Octopus Complex)	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	3,450 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined

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Greenland halibut - Bering Sea / Aleutian Islands	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	11,700 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	34,918 mt	not available
Kamchatka flounder - Bering Sea / Aleutian Islands	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	24,800 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	40,338 mt	not available
Northern Rock Sole (indicator stock for Bering Sea / Aleutian Islands Rock Sole Complex)	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	231,000 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	260,000 mt	not available
Northern rockfish - Bering Sea / Aleutian Islands	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	10,500 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	51,771 mt	not available
Pacific cod - Bering Sea / Aleutian Islands	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	369,000 mt (includes separate BS and AI)	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	278,250 mt	not available
Pacific ocean perch - Bering Sea / Aleutian Islands	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	35,000 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	160,802 mt	not available
Shortraker rockfish - Bering Sea / Aleutian Islands	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	524 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Walleye Pollock - Aleutian Islands	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the “overfishing level” (OFL).	39,600 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	84,005 mt	not available

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Walleye Pollock - Bogoslof	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the "overfishing level" (OFL).	22,000 mt	No B _{MSY} estimate exists. Therefore, no MSST is defined.	undefined	undefined
Walleye Pollock - Eastern Bering Sea	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the "overfishing level" (OFL).	2,470,000 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2,122,000 mt	not available
Yellowfin sole - Bering Sea / Aleutian Islands	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the "overfishing level" (OFL).	222,000 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	366,000 mt	not available
Fishery Management Plan	GROUND FISH OF THE GULF OF ALASKA / GROUND FISH OF THE BERING SEA AND ALEUTIAN ISLANDS MANAGEMENT AREA				
Sablefish	Overfishing is defined as any rate of fishing in excess of the maximum fishing mortality threshold (MFMT). The catch corresponding to fishing at a rate equal to the MFMT is referred to as the "overfishing level" (OFL).	20,400 mt	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	93,066 mt	not available
Fishery Management Plan	BERING SEA / ALEUTIAN ISLANDS KING AND TANNER CRABS				
Blue King Crab - Pribilof Islands	Overfishing is defined as any rate of fishing mortality in excess of M, where M = 0.2. The catch corresponding to fishing at a rate equal to the MFMT is referred to as the "sustainable yield level" (SYL).	1.2 mt	A stock is overfished when it falls below MSST, which is equal to ½ the MSY stock size	3988 mt	1994 mt
Blue King Crab - Saint Matthews Island	Overfishing is defined as any rate of fishing mortality in excess of M, where M = 0.2. The catch corresponding to fishing at a rate equal to the MFMT is referred to as the "sustainable yield level" (SYL).	1,020 mt	A stock is overfished when it falls below MSST, which is equal to ½ the MSY stock size	3,600 mt	1,800 mt
Golden King Crab - Aleutian Islands	Overfishing is defined as any rate of fishing mortality in excess of M, where M = 0.2	5,690 mt	Overfished is not defined	undefined	undefined

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Golden King Crab - Pribilof Islands	Overfishing is defined as any rate of fishing mortality in excess of M, where M = 0.3. The catch corresponding to fishing at a rate equal to the MFMT is referred to as the "sustainable yield level" (SYL).	91 mt	Overfished is not defined	undefined	undefined
Red King Crab - Bristol Bay	Overfishing is defined as any rate of fishing mortality in excess of M, where M = 0.2. The catch corresponding to fishing at a rate equal to the MFMT is referred to as the "sustainable yield level" (SYL).	7,960 mt	A stock is overfished when it falls below MSST, which is equal to ½ the MSY stock size	26,380 mt	13,190 mt
Red King Crab - Norton Sound	Overfishing is defined as any rate of fishing mortality in excess of M, where M = 0.3. The catch corresponding to fishing at a rate equal to the MFMT is referred to as the "sustainable yield level" (SYL).	240 mt	A stock is overfished when it falls below MSST, which is equal to ½ the MSY stock size	1,600 mt	800 mt
Red King Crab - Pribilof Islands	Overfishing is defined as any rate of fishing mortality in excess of M, where M = 0.2. The catch corresponding to fishing at a rate equal to the MFMT is referred to as the "sustainable yield level" (SYL).	569 mt	A stock is overfished when it falls below MSST, which is equal to ½ the MSY stock size	5,218 mt	2,609 mt
Red king crab - Western Aleutian Islands	Overfishing is defined as any rate of fishing mortality in excess of M, where M = 0.3. The catch corresponding to fishing at a rate equal to the MFMT is referred to as the "sustainable yield level" (SYL).	54 mt	Overfished is not defined	undefined	undefined
Snow Crab - Bering Sea	Overfishing is defined as any rate of fishing mortality in excess of M, where M = 0.3. The catch corresponding to fishing at a rate equal to the MFMT is referred to as the "sustainable yield level" (SYL).	67,800 mt	A stock is overfished when it falls below MSST, which is equal to ½ the MSY stock size	154,170 mt	77,100 mt
Southern Tanner Crab - Bering Sea	Overfishing is defined as any rate of fishing mortality in excess of M, where M = 0.3. The catch corresponding to fishing at a rate equal to the MFMT is referred to as the "sustainable yield level" (SYL).	19,020 mt	A stock is overfished when it falls below MSST, which is equal to ½ the MSY stock size	33,540 mt	16,770 mt
Fishery Management Plan	SCALLOP FISHERY OFF ALASKA				
Weathervane Scallop - Alaska	Overfishing is defined as the catch corresponding to fishing at a rate equal to the MFMT is referred to as the "sustainable yield level" (SYL).	1,290,000 pounds of scallop meat	Overfished is not defined	undefined	undefined

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Fishery Management Plan	SALMON FISHERIES IN THE EEZ OFF THE COAST OF ALASKA				
Alaska Coho Salmon Assemblage	The Alaska coho salmon assemblage is subject to overfishing when the exploitation rate of any of the 4 indicator stocks is exceeded.		The Alaska coho salmon assemblage is overfished when adult spawner escapement (natural only) of any of the 4 indicator stocks is below the 50% MSY escapement goal from the most recent T_{coho} years.		
	Indicator stock: Coho salmon - Auke Creeke	0.744	Indicator stock: Coho salmon - Auke Creeke	1360	680
	Indicator stock: Coho salmon - Berners River	0.72	Indicator stock: Coho salmon - Berners River	25,200	12,600
	Indicator stock: Coho salmon - Ford Arm Lake	0.845	Indicator stock: Coho salmon - Ford Arm Lake	8,200	4,100
	Indicator stock: Coho salmon - Hugh Smith Lake	0.59	Indicator stock: Coho salmon - Hugh Smith Lake	3,400	1,700
Chinook salmon - Eastern North Pacific Far North Migrating	The stock is subject to overfishing when catch of adult spawners (hatchery + natural) exceeds the level associated with the 50% escapement goal.	1,327,410	The stock is overfished when adult spawner escapement (hatchery + natural) is below the 50% escapement goal from the most recent T_{chin} years.	1,241,753	620,876
Fishery Management Plan	FISH RESOURCES OF THE ARCTIC MANAGEMENT AREA				
Arctic Cod - Arctic management area	Overfishing is defined as an annual catch in excess of the OFL, where the OFL is based on fishing at the arithmetic mean estimate of FMSY.	0.7	A stock is overfished if it falls below Bmsy.	8,298 mt	8,298 mt
Saffron Cod - Arctic management area	Overfishing is defined as an annual catch in excess of the OFL, where the OFL is based on fishing at the arithmetic mean estimate of FMSY.	0.62	A stock is overfished if it falls below Bmsy.	953 mt	953 mt
Snow Crab - Arctic management area	Overfishing is defined as an annual catch in excess of the OFL, where the OFL is based on fishing at the arithmetic mean estimate of FMSY.	0.36	A stock is overfished if it falls below $\frac{1}{2}$ Bmsy.	1,268 mt	634 mt
Managed under International Agreement	PACIFIC HALIBUT				
Pacific Halibut - Pacific Coast / Alaska	Overfishing is not defined	undefined	A stock is overfished if it falls below the minimum spawning biomass limit equal to 20% of the unfished level.	170 million lbs.	115 million lbs.

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Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Fishery Management Plan	CONSOLIDATED ATLANTIC HIGHLY MIGRATORY SPECIES				
Albacore - North Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.149	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$.	81,110 mt	56,777 mt
Atlantic Sharpnose Shark	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.19	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. From 2002 stock assessment and 2003 Amendment 1.	4,860,000 – 165,000,000 (numbers of sharks)	3,732,480 - 126,720,000 (1-M)Bmsy proxy
Bigeye Tuna - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.17	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$.	422,630 mt	253,578 mt
Blacknose Shark - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.01-0.15	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. From 2002 stock assessment and 2003 Amendment 1.	77,577-288,360 (number of sharks)	62,294-231,553 (number of sharks)
Blacktip Shark - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	not estimated	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. From 2006 stock assessment.	not estimated	not estimated
Blacktip Shark - Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.021-0.163	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. In 2006 stock assessment M ranged across ages; stock assessment unable to determine which model to use so range across all of them.	SSFmsy=1,570,000- 6,440,000 (number of sharks)	1,327,697-5,446,093 (number of sharks)
Blue Marlin - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.07	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$.	25,411 t (SSBmsy)	22,870 t
Blue Shark	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.15	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. From ICCAT stock assessment.	not estimated	not estimated
Bluefin Tuna - West Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.17 (low recruitment) 0.064 (high recruitment)	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$.	SSBmsy = 12,943 mt (low recruitment) SSBmsy = 93,621 mt (high recruitment)	(11,131 mt, low recruitment) (80,514 mt, high recruitment)

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Status Determination Criteria used in the Most Recent Status Determinations

NOTE: All criteria contained in this table are considered the best scientific information available. For some stocks, criteria have not yet been implemented in the Fishery Management Plan.

Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Bonnethead Shark	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.31	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. From 2002 stock assessment and 2003 Amendment 1.	$\text{SSF}_{\text{msy}}=1,990,000$ (number of sharks)	1,400,000 (number of sharks)
Dusky Shark	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.01-0.05	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. From 2006 Dusky Shark stock assessment; tables do not include M; used state space age structured model.	absolute estimates not calculated (only ratios)	not available
Finetooth Shark	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.03	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. From 2002 stock assessment and 2003 Amendment 1.	3,200,000 (number of sharks)	2,400,000 (number of sharks)
Large Coastal Shark Complex	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	not estimated	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. From 2006 stock assessment.	not estimated	not estimated
Longbill Spearfish - West Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	not estimated	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$.	not estimated	not estimated
Pelagic Shark Complex	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	not estimated	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$.	not estimated	not estimated
Porbeagle Shark	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.025-0.075	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. From 2005 Canadian stock assessment; Assessment provides only Z, not M.	29,382 - 40,676 mt	not available
Sailfish - West Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	not estimated	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$.	not estimated	not estimated
Sandbar Shark	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.004-0.06	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. In 2006 stock assessment M ranged from 0.1 to 0.2 depending on age.	349,330-1,377,800 (number of sharks)	301,821-1,190,419 (number of sharks)
Scalloped hammerhead - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.11	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$.	62,000 (number of sharks)	not available

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Status Determination Criteria used in the Most Recent Status Determinations

NOTE: All criteria contained in this table are considered the best scientific information available. For some stocks, criteria have not yet been implemented in the Fishery Management Plan.

Stock	Overfishing Definition	Estimate of Overfishing	Overfished Definition	Estimate of Bmsy or Proxy	Estimate of Overfished
Shortfin Mako Shark	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.029-0.104	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. From ICCAT stock assessment.	183,612-863,655 mt	not available
Skipjack Tuna - West Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	not estimated	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$.	not estimated	not estimated
Small Coastal Shark Complex	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.09	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. From 2002 stock assessment and 2003 Amendment 1.	30,000,000 (number of sharks)	21,000,000 (number of sharks)
Swordfish - North Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.222	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$.	61,860 mt	49,488 mt
White Marlin - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	0.03	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$.	29,240 mt	23,171 - 26,112 mt
Yellowfin Tuna - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{\text{limit}} = F_{\text{MSY}}$.	absolute estimates not calculated (only ratios)	A stock is overfished when the stock level biomass falls below MSST, which is set at $\text{MSST} = B_{\text{LIMIT}} = (1-M)B_{\text{MSY}}$ when $M < 0.5$; $\text{MSST} = B_{\text{LIMIT}} = 0.5B_{\text{MSY}}$ when $M > 0.5$. For Yellowfin Tuna, $\text{MSST} = 0.5B_{\text{MSY}}$.	absolute estimates not calculated (only ratios)	absolute estimates not calculated (only ratios)